

Installation Procedures. Proper Rotor Direction. and Care

Baer Claw Rotors employ a REVERSE SLOT & DRILL pattern coupled with a rust inhibiting clear zinc plated finish. To ensure the proper direction of rotation, each rotor is labeled with a sticker denoting "L" (driver side) or "R" (passenger side). Refer to the figure and instruction below to ensure proper direction of rotation when installing your Baer Claw Rotors.



Rotors that are directionally slotted/ventilated must rotate in the correct direction to allow for adequate airflow and proper cooling of the rotor.

Externally modified rotors employ a **REVERSE SLOT & DRILL** pattern. These patterns are currently used in most street driving applications. These patterns lower the potential for "carbon smearing" or "transfer" from the pad material to the trailing side of the slots on the rotor. In some cases, "carbon smearing/transfer" can affect the rotational balance of the rotor and cause a 'shake' or 'nibble' while braking.

A removable stick-on label is placed on the Baer Claw rotors to designate which side of the vehicle the rotors are to be installed. Baer Claw rotors that have a stick-on label with the letter "L" are to be installed on the left (driver) side of the vehicle. Baer Claw rotors that have a stick-on label with the letter "R" are to be installed on the right (passenger) side of the vehicle.

The rotor shown on this sheet is a left (driver) side rotor. The surface slots on the rotor rotate forward. Always install the rotors in this fashion.

NEVER INSTALL ROTORS IN THE OPPOSITE DIRECTION OF ROTATION, heat related fatigue and failure can result.

It is normal for the rotor area swept by the pad to wear through the zinc plated finish over time. The plated areas of the rotor not swept by the pad will continue to provide a barrier. This barrier will continue to delay the development of surface scaling/rust.

Baer brakes strongly recommends cleaning rotors with mild cleaners such as traditional dish soap and warm water <u>only</u> when necessary. It is imperative to avoid harsh cleaners that may contain acids or other caustic solutions. This will prevent any staining, discoloration, or pitting of the brake rotors.

For additional technical information, answers to frequently asked questions, and/or additional product line information, please visit: www.baersport.com or www.baer.com

We at Baer understand there are many options when it comes to performance brake suppliers and appreciate your business. Great pride and care were taken in designing, assembling, and packaging all components of this kit.

Thank you for your purchase.



Baer Zinc Plating Finish

<u>DISCLAIMER:</u> Baer Claw rotors come with an industrial zinc plated finish to provide a barrier that delays the development of surface scaling/rust. The zinc plating present on Baer Claw rotors is deployed as a protectant. As a result, the surface finish of the rotors may vary.



ROTOR & PAD PREPARATION

STREET OR LIGHT TRACK APPLICATIONS

What proper "Rotor Preparation" is all about

To properly prepare the brake system for duty, the rotors must be subjected to the "Seasoning" process. During the seasoning process, the most visible effects are the burning of machine oils from the surface of the iron and the establishment of a wear pattern between the pad and rotor.

The seasoning process performs another task of relieving the internal stresses within the rotor material. An example of this process is pouring water into a glass of ice. The ice cracks when the water comes in contact. This example demonstrates the effects of internal stresses. The rotor casting and cooling processes leave the rotor with internal stresses like the example of cold ice cracking when contacting the warmer water.

Gradually heating the rotor material allows its crystalline structure to reconfigure, relieving the internal stresses present from the casting process. After these stresses are relieved, the rotor can readily accept the heat of bedding pads. Heating the rotors before they are fully seasoned can result in material deformation due to the unrelieved internal stresses in the material. This deformation may cause vibration when the brakes are applied.

Rotors must be gradually elevated to "race" temperatures before any severe use. A 'nibble', or slight vibration, normally indicates rotors that were heated too quickly.

Following the initial "Rotor Seasoning" process; when running your car at open track events or serious canyon carving, you should use the first lap of a session (or first couple of miles of open road) to warm the brakes as well as the engine, gearbox, etc.

An engine turns combustion into motion, the brakes then turn that motion into thermal energy through friction...and lots of it! Unlike the engine, there is no cooling system for the brakes. This means the brakes could use the courtesy of a warm-up lap to allow the rotors to gradually come up to operating temperature.

Remember to <u>ALWAYS WARM THE BRAKES</u> before any heavy use! It is also considered mandatory to run air ducts to the eye (center) of the rotor on any car used on track or in actual competition.



CLAW ROTOR BREAK IN PROCEDURE:

Use the vehicle for 5 to 6 days of gentle driving. Use the brakes to the same extent that you used the stock brakes. **DO NOT TEST PERFORMANCE OR AT- TEMPT HEAVY USE UNTIL ALL ITEMS OUTLINED HAVE BEEN COMPLETED. It is imperative the rotors are not excessively heated at this stage.** They require temperature-cycling to relieve the internal stresses present from the casting process.

Note: Zinc plated rotors (optional performance upgrade) require a couple extra days of driving to wear through the plating before the "Seasoning" process will begin.

Following the 5 to 6 days of average driving, you may begin the break-in procedure detailed below:

- 1. Find a suitable location where you can safely perform a series of near stops without violating any traffic laws.
- 2. Accelerate to 30 mph, then moderately brake to a near stop (5-10mph). Perform this action **3-4 times**, never coming to a complete stop on any of the attempts.
- 3. Drive around for 10 minutes, braking as little as possible to allow the brakes to cool. Do not come to a complete stop during this period as the brake pads could be damaged by being pressed against the hot rotors.
- 4. Accelerate to 50 mph, then aggressively brake to a near stop (5-10mph). Perform this action **4-6 times**, never coming to a complete stop each time. During this step, you should be braking hard but not to the point where the tires skid.
- 5. Drive around for 30 minutes, braking as little as possible to cool the brakes down. Do not come to a complete stop during this period as the brake pads could be damaged by being pressed against the extremely hot rotors. Baer recommends freeway driving at this point if possible to reduce the chance of having to brake and to allow the brakes to come down to ambient temperature.
- 6. Leave the vehicle parked overnight to allow the brakes to fully settle. For automatic vehicles, leave the vehicle in park. For manual vehicles, leave the vehicle in gear. **DO NOT** engage the parking brake during this cooling period, but ensure the vehicle cannot roll on its own. The break-in procedure has been completed following this cooling period.